USDA-MI Section Maps

The $8^{1}/_{2}$ x 11 section maps in field offices are being phased out due to the availability of updated aerial photography, as well as to reduce the necessity of creating and storing paper hard-copies.

There are still many times, however, when it is convenient to have a paper map on hand. Users may generate individual section maps within ArcMap as needed, but this process can be time-consuming and inefficient.

As an alternative, maps of each section in Michigan have been automatically generated and posted to a centralized server at the MI State Office. Users may view and print these maps without having to build a map from scratch.

* The USDA-MI section maps are intended for program purposes only - not for publication. *

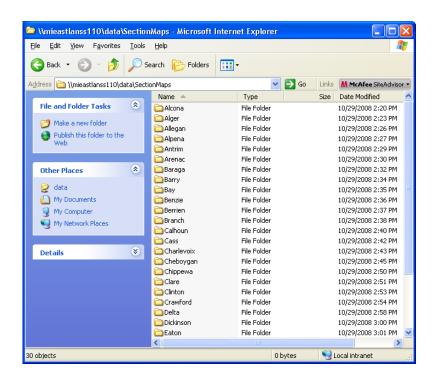
Accessing the Maps

NOTE: The examples in this document use **Internet Explorer** for navigating to the saved section maps. **Windows Explorer** may also be used, depending on user preference.

Start the **Explorer** web browser, type the following address into the **Address** bar, and hit **Enter**: \\mieastlanss110\\data\SectionMaps

HINT: Adding a bookmark or creating a desktop shortcut to this location makes future access much easier.

- To add a Bookmark, click "Favorites, Add to Favorites".
- To create a **Shortcut**, drag and drop the "folder" icon in the **Address** bar onto your Windows Desktop.



Folders for every county in Michigan are stored in this location.

(Depending on your current settings, the IE window may appear slightly different than shown here.)

Double-click the county of interest to access the township subfolders.

Township Subfolders

Each county folder contains several "township" subfolders which house the individual section map files. Folder names are based on the Public Land Survey System (PLSS) numbering and the local political name of the municipality:

[PLSS Tier][PLSS Range][PLSS Section]---[Municipality_Name(s)]

For example, the folder for **Bath Township** in Clinton County, which is PLSS tier "**05N**" and PLSS range "**01W**", is named "**05N01W---Bath_Twp**".

NOTE: Section maps were not created for land areas which do not have a PLSS TRS value, such as areas surveyed under the French Claim Boundary system.

Subfolder Name Exceptions

1. PLSS---Multiple political townships

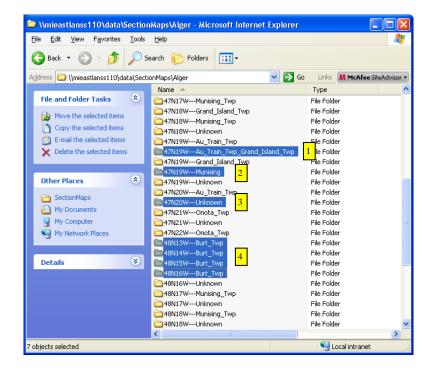
Sections which contain portions of multiple political townships.

Usually occurs near urban municipalities, where land areas are fragmented by water features, or where civil division boundaries do not follow a direct course.

2. PLSS---City name only

Sections which lie completely within city or village boundaries.

If a section is partially within a city and partially within a township, it will be stored within the "*PLSS---TOWNSHIP*" folder.



3. PLSS---Unknown

The municipality name could not be determined. Usually offshore areas which do not contain geospatial features for minor civil divisions.

4. Unique PLSS---Repeated political township

The political township spans multiple PLSS townships. A very common occurrence, especially in northern MI where hundreds of sections are often administered as one local political township. This folder structure allows for multiple occurrences of a section number within a single political township.

Double-click the desired township subfolder to access the section map files.

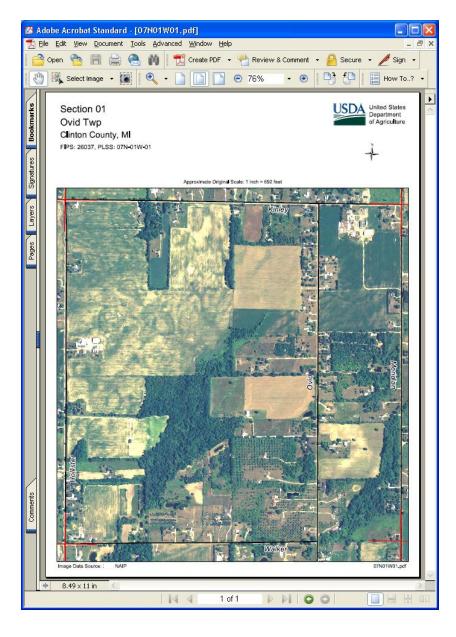
Section Map Files

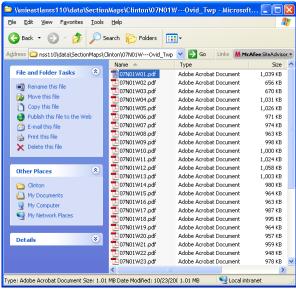
The section map files are Adobe PDF documents, generally around 1 Mb in size. The file naming convention is:

[PLSS Tier][PLSS Range][PLSS Section].pdf

Double-click on the file name to open the map.

Depending on your current configuration, the PDF file will open in either Acrobat or Acrobat Reader.





The section maps include the following map elements:

Title

All location information for the section

North Arrow

Indicates north, accounting for rotational correction. (see "Data Frame" below).

Approximate Scale

Indicates the number of ground feet represented by an inch on the map.

The section maps were created to display an entire section on one page. This usually results in an uneven scale instead of a standard 1:660 (8 inches = 1 mile).

Data Frame

- NAIP photography (natural color)
- Roads and road names (black)
- Section corners (red)

The data frame was automatically rotated to reduce the amount of "tilt" displayed on the map. This may cause oddly-shaped or fragmented sections to be oriented unexpectedly. Please refer to the "Errors" section for contact information.

Miscellaneous

Printing and Saving

NOTE: In order to reduce negative impact on network performance, downloading or printing all of the maps for an entire county is <u>highly discouraged</u>.

Users may print and, if necessary, save individual section maps as with any other PDF document...

To Print:

- Click "File, Print" or click the Print button. Set page scaling to "None" to maintain map scale. To Save:

- In Acrobat, click "File, Save As..."
- In Acrobat Reader, click "File, Save a Copy..."

If saving individual maps, be sure to identify a location on your local PC which is **NOT** included in nightly backups. Do not save section map files on network drives such as "F:", "H:", or "S:", nor to anywhere on your PC which is backed up nightly, such as "Documents and Settings", "My Documents", etc.

Data Caveats

Roads

The primary road name, designated by the Michigan Center for Geographic Information (MCGI), was used for all road labels. Unexpected road names may occur in cases where a particular road has historically been known by multiple names. As an example, the state highway "M-21" is also known in some locations as "Bluewater Highway" and is labeled as such on some of the section maps.

The presence of a dense transportation network within a section will result in many overlapping road labels. The appearance of road names will be most effective in rural areas.

NAIP

The presence of cloud cover may obscure some areas on the NAIP imagery. Depending on the availability and quality of earlier NAIP photography, maps of obscured areas can be reproduced at the Michigan State Office, substituting imagery from a previous year.

Section Corners

Section corners located in areas continuously covered by water will generally not be displayed. Users are reminded that multiple section corners may exist within a small area due to corrections necessary to compensate for the curvature of the Earth.

Errors

The section maps were automatically generated based on programming developed at the Michigan State Office. A random cross-sample was quality checked as created, but due to the large number of sections in the state, no attempt was made to review each map individually. Certain maps may contain errors which require correction, as in the case of extreme rotation in oddly-shaped sections, or where cloud cover obscures the photography. Maps containing such errors can be recreated at the Michigan State Office.

If you find errors in the location or content of any section map, please contact:

Brent Stinson, NRCS State GIS Specialist (517) 324-5141 brent.stinson@mi.usda.gov